US MARINE CORPS ACTIVE DUTY EYE INJURY SUMMARY CALENDAR YEAR 2004

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2013



INTRODUCTION: In 2010 the Armed Forces Health Surveillance Center (AFHSC) and Tri-Service Vision Conservation and Readiness Program (TSVCRP) of the US Army Public Health Command (USAPHC) began development of an Annual Active Duty Military Eye Injury Summary that would detail cause and type of injury along with demographics of eye injuries (Age, Gender, Rank, Occupational Group).

The first edition of the summary and annual summarys back through calendar year 2000, were produced in the spring of 2011. An analysis of years 2000-2010 was published in the May 2011 Medical Surveillance Monthly Report (MSMR). The AFHSC also developed a Case Definition for Eye Injuries that details the code set and methodology used to develop the summarys. Both the MSMR Article and Case Definition for Eye Injuries are available on the AFHSC website: http://afhsc.army.mil/home.

This summary contains detailed data, along with a set of summary tables detailing Ambulatory and Hospitalization rates (per 1000 person-years) for Injury Group, Cause of Injury and Occupational Group. Summary tables for Deployment-Associated Eye Injuries detailing frequency of Eye Injuries by Type of Injury and Occupational Group are also provided. Occupational Group data is for Enlisted members only. Deployment-Associated Eye Injuries are presented without regard to Ambulatory or Hospitalized status.

As one of the underlying goals of the summary is to make eye injury surveillance data accessible and useable, individual annual eye injury summarys for all years and all services (Combined DoD, Army, Navy, Air Force, Marine Corps and Coast Guard) are posted on the USAPHC public website.

For questions or additional information regarding the summarys please contact the TSVCRP:

By Email: <u>usarmy.apg.medcom-phc.mbx.dcpm-tri-service-optometry@mail.mil</u> Telephone: 410-436-2714 FAX: 410-436-1325

Additional program information and educational materials can be found at: http://dodvision.com/ and the USAPHC Public Website at: http://phc.amedd.army.mil/Pages/default.aspx

CONTENTS:

- 1) Summary of Code Groupings
- 2) All diagrams by Injury Group
- 3) All diagrams by Cause of Injury
- 4) All diagrams by Occupational Group
- 5) Deployment-Associated Eye Injury data not available from 2000-2004
- 6) 2004 Marine Corps Eye Injury complete statistics

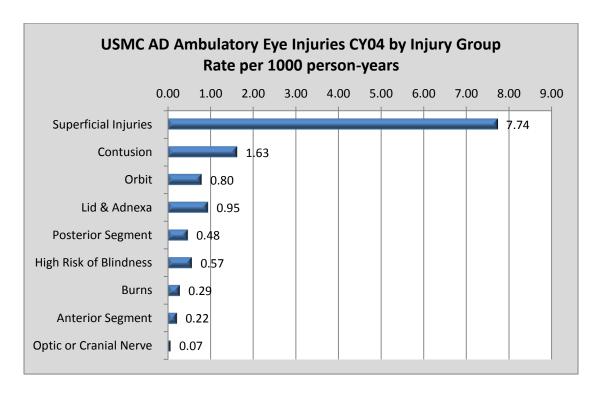


INJURY CODE GROUP DETAILS: The following code groupings were used to develop the summary. Additional details may be found in the AFHSC Case Definition available at: http://afhsc.army.mil/home.

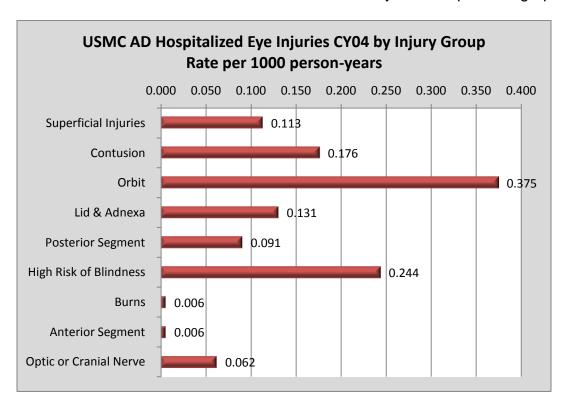
- 1) Superficial: all 918 series codes (superficial injury of eye and adnexa) and all 930 series codes (foreign body on external eye).
- 2) Contusion: all 921 series codes (contusion of eye and adnexa).
- **3) Orbit**: All 802 series codes (fracture of face bones), 870.3 and 870.4 (penetrating wound of orbit without and with foreign body) and 376.32 (orbital hemorrhage).
- **4)** Lid/adnexa: all 870 series codes (open wound of ocular adnexa) with the exception of 870.3 and 870.4 (see orbit above).
- **5) Posterior segment**: 362.81 (retinal hemorrhage), all 361.0x series codes (retinal detachment with retinal defect), 363.61 (choroidal hemorrhage, unspecified), 363.63 (choroidal rupture), 379.23 (vitreous hemorrhage), 360.00 and 360.01 (purulent and acute endophthalmitis).
- 6) High risk of blindness: all 871 series codes (open wound of eyeball).
- 7) Burns: all 940 series codes (burn confined to eye and adnexa) as well as all 940.x2 codes (burns to eye with other parts of face, head and neck).
- **8)** Anterior segment: 364.41 (hyphema), 366.21 and 366.22 (localized and total traumatic cataract), and 364.76 (iridodialysis).
- 9) Optic/cranial nerve: 950.0 (optic nerve injury), 950.1 (injury to optic chiasm), 950.9 (injury to optic nerve and pathways, unspecified), 951.0 (injury to oculomotor nerve), 951.1 (injury to trochlear nerve) and 951.3 (injury to abducens nerve).

DETAILS FOR TOTAL NUMBERS: Because patients may have been coded with more than one injury group or cause of injury, the sum of cases by injury group and the sum of cases by causes of injury will be greater than the total number of patients.

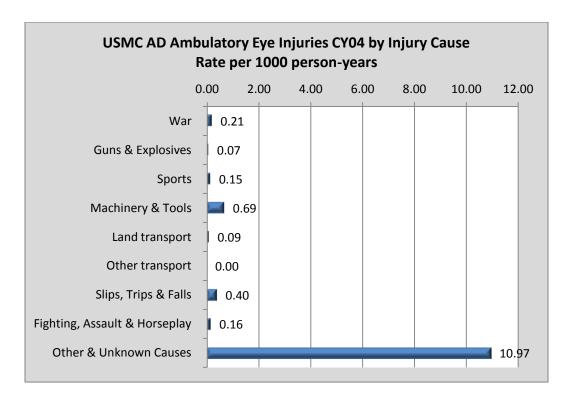




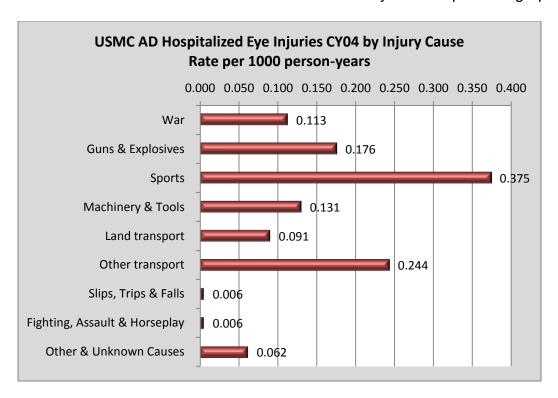
Please note the difference in scale between Ambulatory and Hospitalized graphs



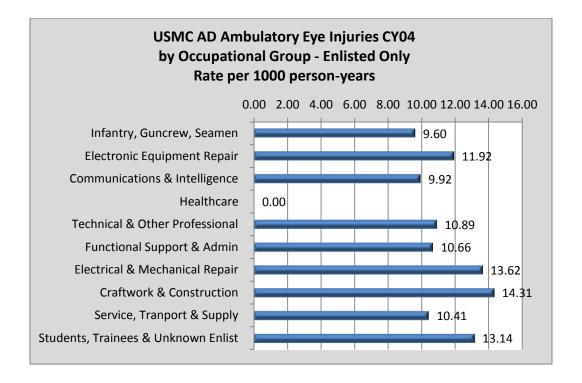




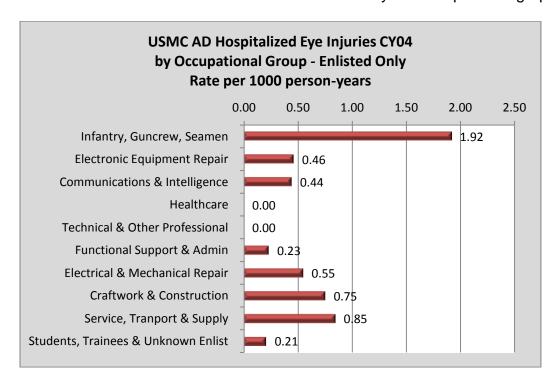
Please note the difference in scale between Ambulatory and Hospitalized graphs







Please note the difference in scale between Ambulatory and Hospitalized graphs





		as builded	, NATE AC	in a	2004							
				MTF Visits				ociated Healthcare		Hospital Primary		
	Primary		All Diagnoses		Primary Count % total		All Diagnoses Count % total3			_	All Dia	
ALL ACTIVE COMPONENT	Count	Rate ¹	Count	Rate	Count	% total	Count	% total	Count	Rate	Count	Rate
Total	1,725	9.77	2,003	11.34	-	-	-	-	42	0.24	133	0.7
Superficial Injuries	1,243	7.04	1,367	7.74	-	-	-	-	4	0.02	20	0.1
Contusion	224	1.27	287	1.63	-	-	-	-	9	0.05	31	0.1
Orbit	99	0.56	141	0.80	-	-	-	-	23	0.13	66	0.3
Lid & Adnexa Posterior Segment	140 47	0.80	167 84	0.95	-	-	-	-	10 7	0.06	23 16	0.1
High Risk of Blindness	88	0.50	101	0.57	_	_	_	_	23	0.13	43	0.2
Burns	42	0.24	51	0.29	_	-	_	-	0	0.00	1	0.0
Anterior Segment	24	0.14	39	0.22	-	-	-	-	1	0.01	1	0.0
Optic or Cranial Nerve	9	0.05	13	0.07	-	-	-	-	5	0.03	11	0.0
	4.504	0.05	4.004	44.40						0.05	400	- 0.0
Male Female	1,634 91	9.85 8.52	1,904 99	11.48 9.27	-	-	-	-	42 0	0.25	133 0	0.0
remaie	31	0.32	33	3.27	-	-	-	-	U	0.00		0.0
War	21	0.12	37	0.21					12	0.07	34	0.1
Guns & Explosives	12	0.07	13	0.07					43	0.24	91	0.5
·	22			0.15						0.01	4	
Sports		0.12	26						1			0.0
Machinery & Tools	117	0.66	121	0.69	. 12				2	0.01	3	0.0
Land transport	10	0.06	16	0.09		not as	sessed ²		4	0.02	11	0.0
Other transport	0	0.00	0	0.00					0	0.00	1	0.0
Slips, Trips & Falls	63	0.36	71	0.40					2	0.01	5	0.0
Fighting, Assault & Horseplay	17	0.10	29	0.16					2	0.01	6	0.0
Other & Unknown Causes	1,654	9.37	1,937	10.97					16	0.09	57	0.3
ENLISTED (all diagnoses combined)												
Enlisted	1,525	9.66	1,782	11.29	-	-	-	-	37	0.23	125	0.7
<20	231	6.84	280	8.29	-	-	-	-	5	0.15	20	0.5
20-24	755	9.76	894	11.56	-	-	-	-	27	0.35	84	1.0
25-29 30-34	286 119	12.14 10.30	327 134	13.88 11.60	-	-		-	5	0.21	14 3	0.5
35-39	86	11.20	97	12.63	_	-	_	-	0	0.00	3	0.2
>=40	48	12.35	50	12.87	_	-	_	-	0	0.00	1	0.2
E0-E4	997	9.38	1,182	11.13	-	-	-	-	34	0.32	110	1.0
E5-E9	528	10.24	600	11.64	-	-	-	-	3	0.06	15	0.2
	207		255	0.50						0.57		
Infantry, Guncrew, Seamen Electronic Equipment Repair	287 116	7.76 10.72	355 129	9.60 11.92	-	-	-	-	21 1	0.57	71 5	1.9 0.4
Communications & Intelligence	97	8.59	112	9.92	_	-	-	-	2	0.03	5	0.4
Healthcare	-	-		-	_	-	_	-	_	-		
Technical & Other Professional	38	9.41	44	10.89	-	-	-	-	0	0.00	0	0.0
Functional Support & Admin	247	9.54	276	10.66	-	-	-	-	1	0.04	6	0.2
Electrical & Mechanical Repair	296	11.62	347	13.62	-	-	-	-	5	0.20	14	0.5
Craftwork & Construction	50	12.55	57	14.31	-	-	-	-	0	0.00	3	0.7
Service, Tranport & Supply tudents, Trainees & Unknown Enlist	181	9.02 11.07	209	10.41 13.14	-	-	-	-	6	0.30	17	0.8
tudents, Trainees & Onknown Enlist	213	11.07	253	13.14	-	-	-	-	1	0.05	4	0.2
OFFICER (all diagnoses combined)												
Officer	200	10.65	221	11.77	-	-	-	-	5	0.27	8	0.4
<20	-	-	-	-	-	-	-	-	-	-	-	
20-24	17	8.41	18	8.90	-	-	-	-	0	0.00	0	0.0
25-29	56	12.39	63	13.94	-	-	-	-	2	0.44	2	0.4
30-34 35-39	48 32	9.19 8.48	53 37	10.15 9.80	-	-	-		3	0.57	5 1	0.9
>=40	47	14.53	50	15.46	_	-	-	-	0	0.00	0	0.0
7-10		14.55	30	13.40						0.00		0.0
O0-O3,W0-W3	136	10.94	151	12.15	_	-	_	-	5	0.40	6	0.4
O4-O10,W4-W5	64	10.09	70	11.04	-	-	-	-	0	0.00	2	0.3
General/Flag Ofc & Executives	16	22.10	16	22.10	-	-	-	-	0	0.00	0	0.0
Tactical Operations Off.	59	6.94	70	8.24	-	-	-	-	4	0.47	6	0.7
Intelligence Off.	12	12.93	13	14.01	-	-	-	-	1	1.08	1	1.0
Engineering & Maintenance Off. Healthcare Off.	24	11.34	27	12.76	-	-	-		0	0.00	0	0.0
Scientists & Professional Off.	3	6.01	3	6.01	-	-	-	-	0	0.00	0	0.0
Administrative Off.	22	14.36	22	14.36		-	_	-	0	0.00	0	0.0
Supply & Logistics Off.	20	8.18	23	9.41	-	-	-	-	0	0.00	0	0.0
	44	21.66	47	23.13	-	-	-	-	0	0.00	1	0.4
Students, Trainees & Unknown Off.												

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Prepared by Armed Forces Health Surveillance Center (AFHSC)

Source: Defense Medical Surveillance System (DMSS) as of 29-MAR-2011



^{2.} Use of ICD-9-CM E-codes for "cause of injury" is largely incomplete for theater healthcare records and therefore omitted. 3. Person-time is not available for deployers so the proportion of the total number of diagnoses is shown.